

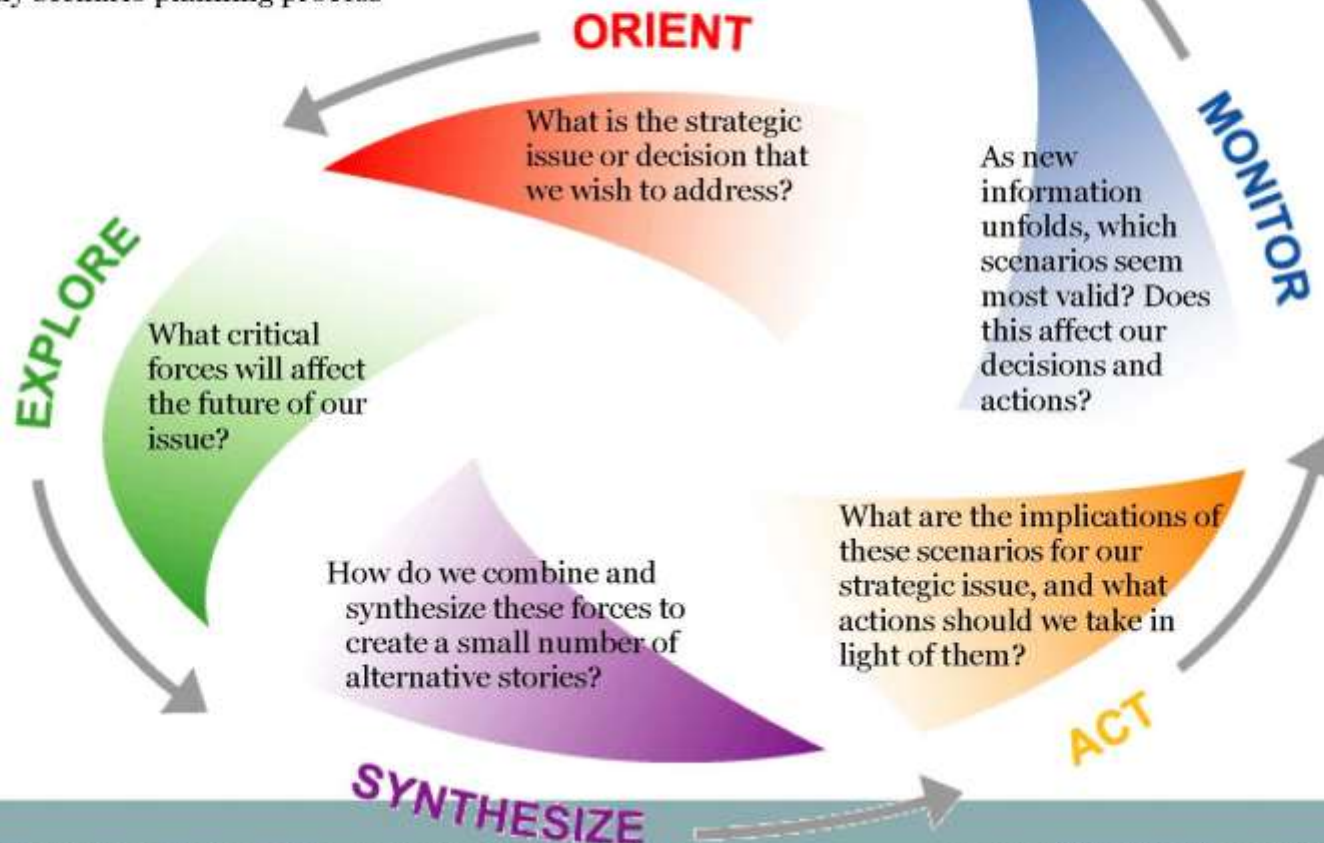


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Explaining Scenarios: A Basic GBN Scenario Creation Process

This diagram describes the 5 key steps required in any scenario planning process



Global Business Network (GBN) -- A member of the Monitor Group

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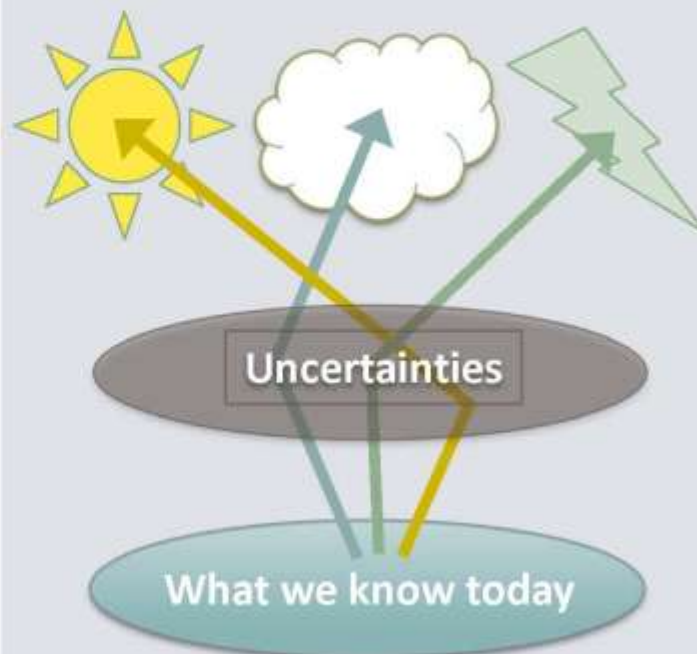
Scenario Planning vs. Forecasting

- *Scenarios overcome the tendency to predict, allowing us to see multiple possibilities for the future*

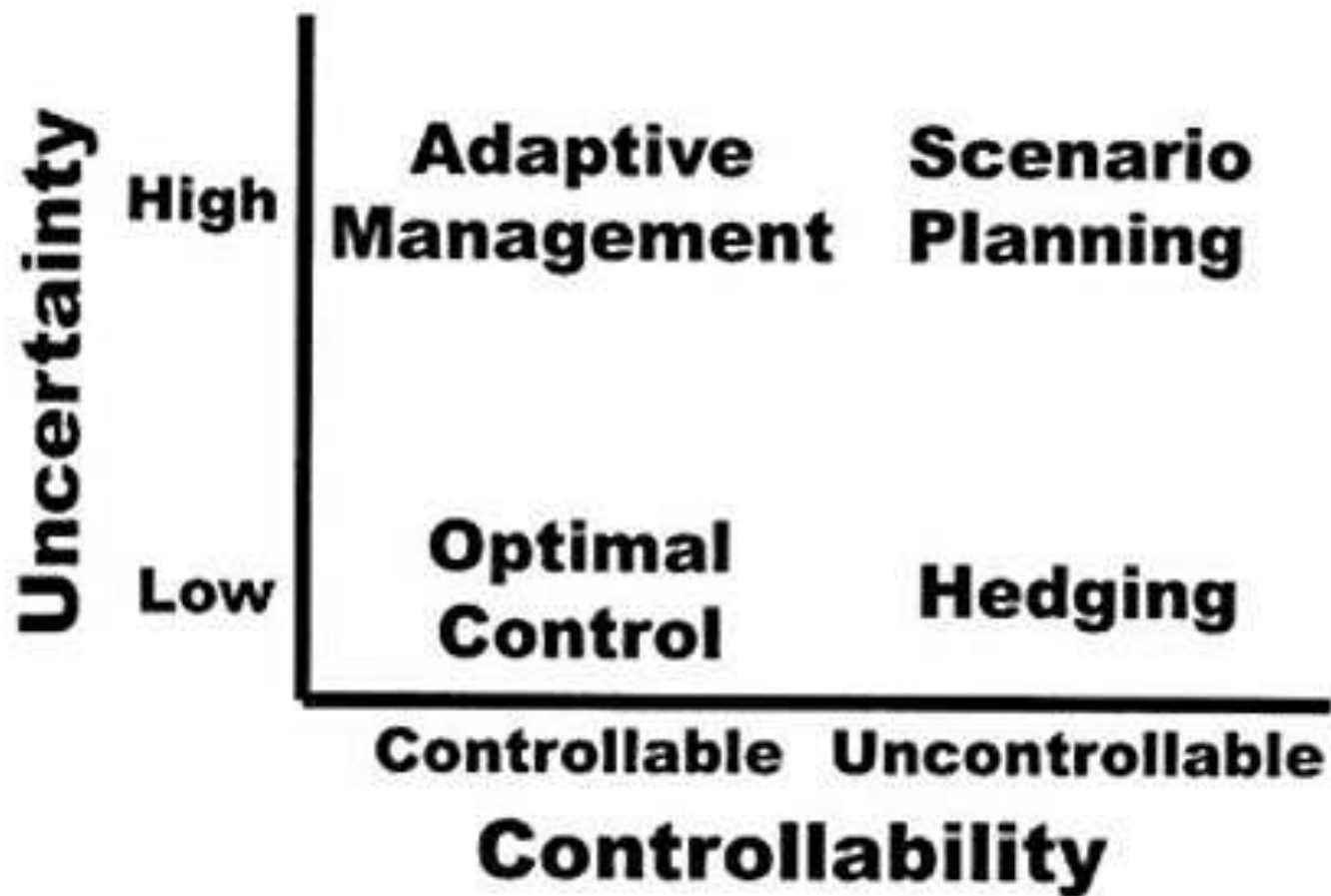
- Forecast Planning
- One Future



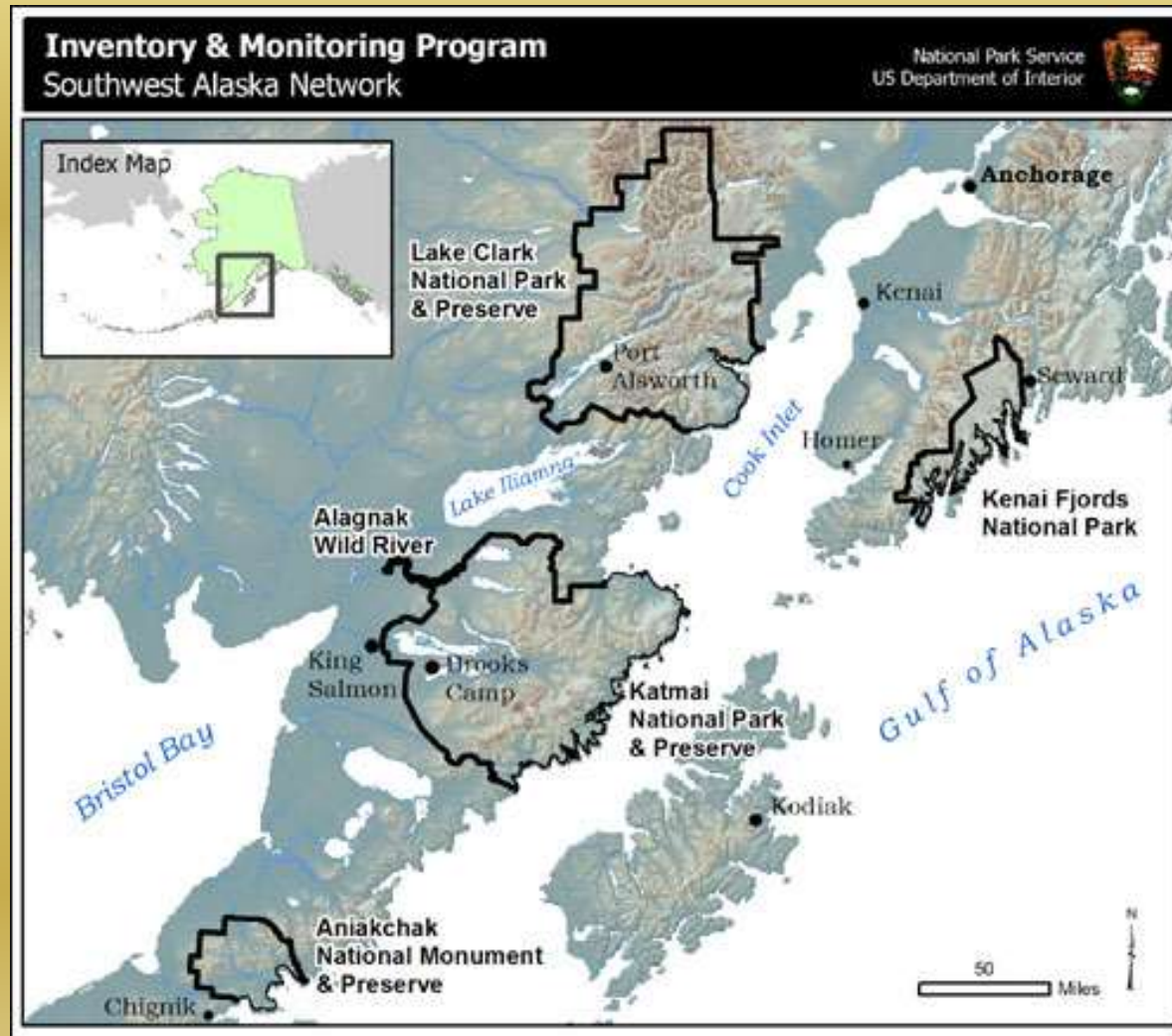
- Scenario Planning
- Multiple Futures



“We use scenario planning to rehearse the future to avoid the management surprises”



Southwest Alaska Network (SWAN)



National Park Service



SWAN Parks and Sites



Aniakchak



Lake Clark



Kenai Fjords



Katmai

Selected Drivers (Coastal)

Climate Drivers (or, "Scenario Drivers based on Climate")	Uncertain	High certainty	Important
Temperature	X		X
Precipitation	X		X
Freeze-up		X	
Length of growing season		X	
Sea Level	X		
Water availability	X		
Relative Humidity	X		
Wind Speed (separate from Aleutian Low)	X (duration)	X (increase)	
PDO	X		
Extreme Events (temperature)		X	
Extreme Events (precipitation)	X	X	
Extreme Events (storms)		X	X

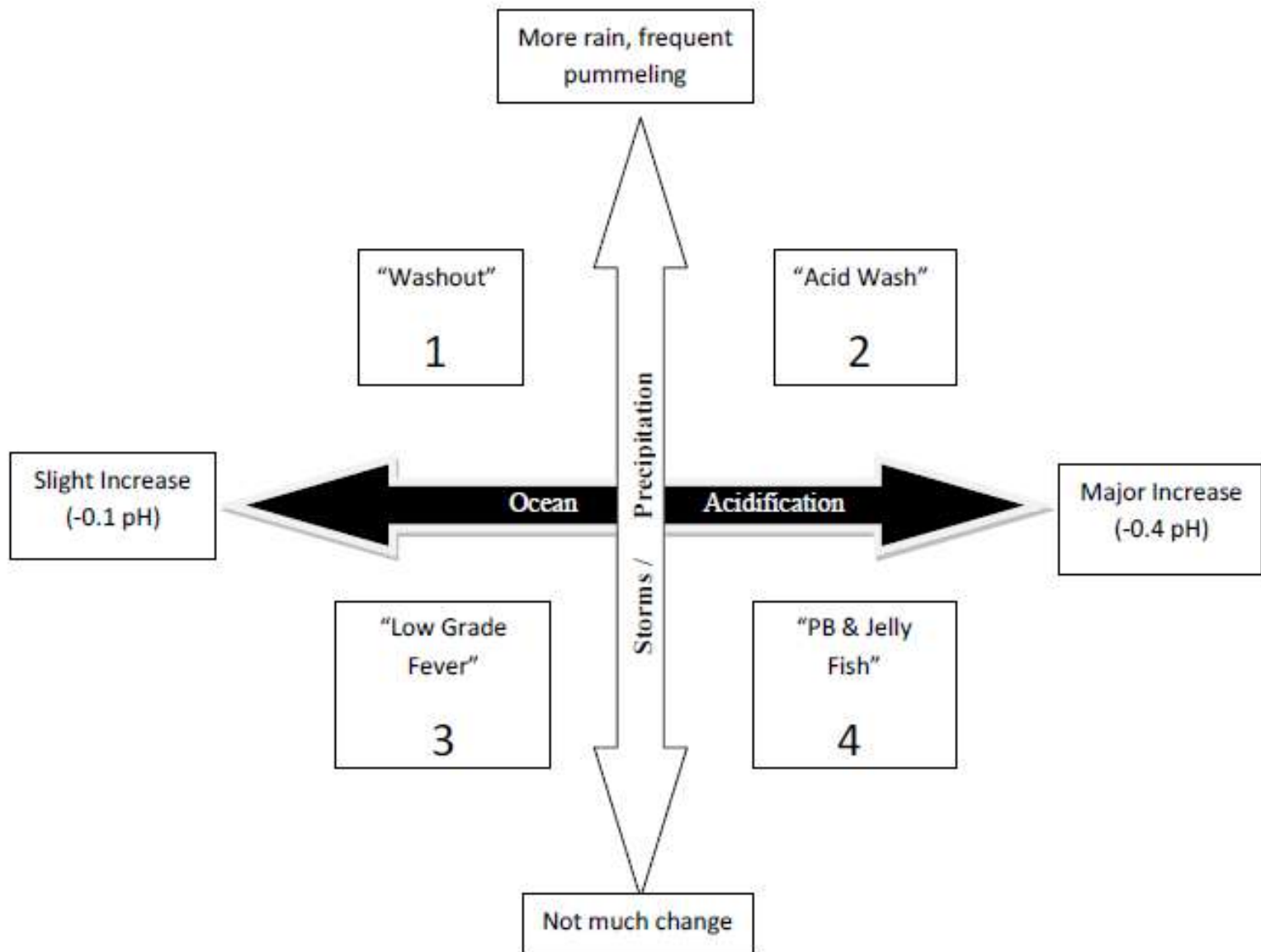
Selected drivers to explore:

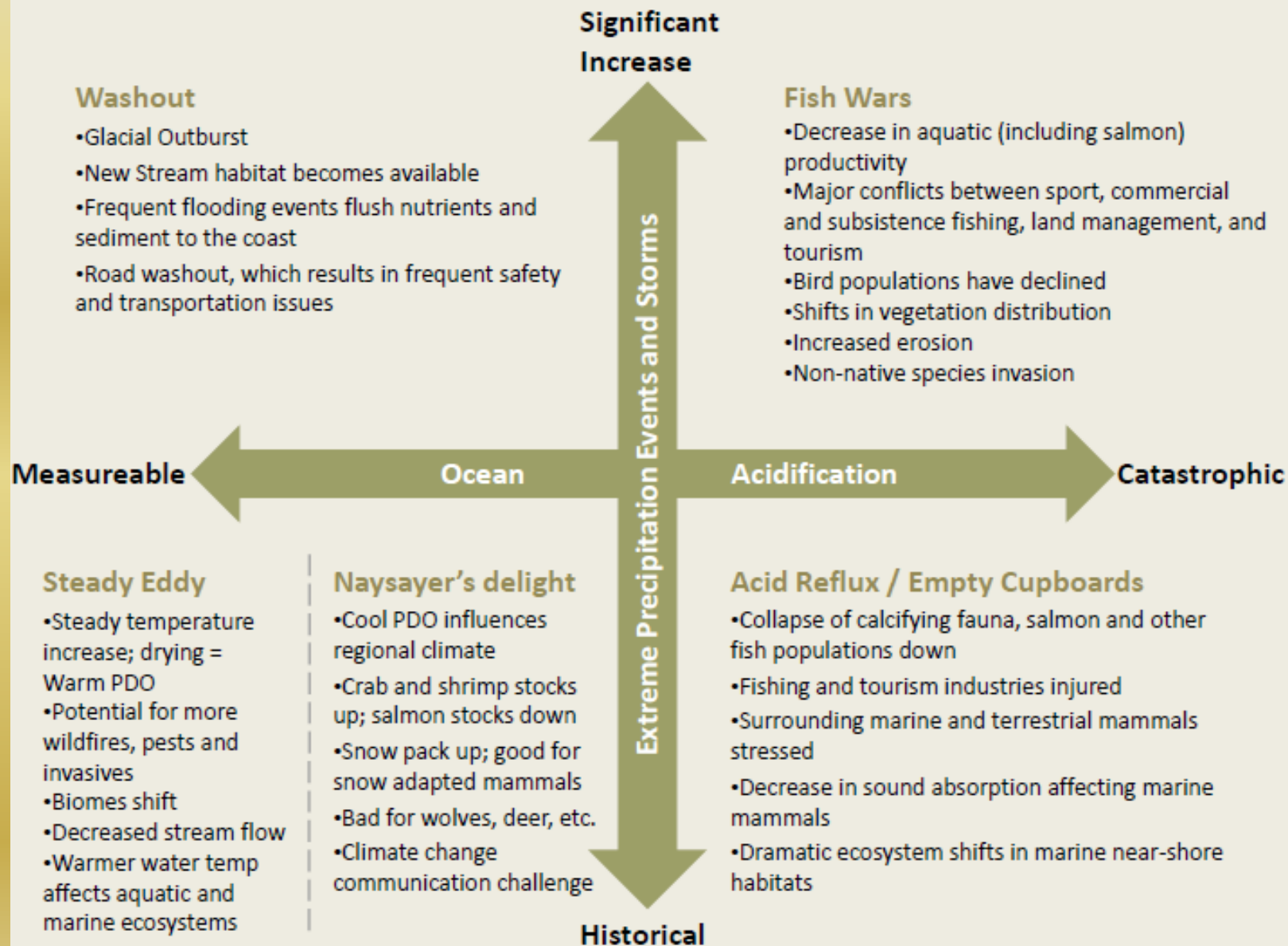
***Acidification:
Temperature:
Storms***

Precip

Additional drivers introduced by the group:

- **Ocean Acidification**
- **Salinity (onshore/near shore)**
- **Aleutian Low**
- **Extreme Event (wind)**
- **AK Coastal Current**







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PHASE 1—SCIENCE FOCUS

ORIENT

Scope Project

- Core project team
- Goals & objectives
- Process
- Tasks/assignments

Invite additional science experts for this step

EXPLORE/
REVIEW

Prioritize focal resource to include in this project

Share science & management knowledge

Resource vulnerability assessment (RVA) (objectives 2 & 3)

Resource scenarios (objective 1)

SYNTHESIZE/
ASSESS

Plan how to build resource vulnerability assessments

Explore critical uncertainties & create first draft of resource scenarios

Develop pilot RVA to test applicability to fire management officer's needs

Review & refine with managers

Link RVAs to resource scenarios via key drivers

Review pilot RVA & further refine & develop a set of RVAs

Review & refine with managers

Refine resource scenarios

Blue = Scientist task

Red = Manager Task

Purple = Collaborative Task

PHASE 2—MANAGEMENT FOCUS

DEVELOP

Park Prepares For Future Floods

By Michael Hosking, Museum Curator

April 10, 2012



Park buildings, including the John Brown Museum, are inundated at the corner of Potomac Street and Shenandoah Street during the flood of 1985. Copyrighted photo by David T. Gilbert.

In 2003, Harpers Ferry National Historical Park completed an updated flood response plan. Due to rapid changes in climate and heavier rainfall, they have recently been engaged in a detailed update to this plan in order to be ready for the next flood event.

Harpers Ferry, West Virginia, located at the confluence of the Shenandoah and Potomac Rivers, has had 55 recorded floods since 1748. According to the National Weather Service, the worst of them was in 1936 when the rivers crested at 36.5 feet; the highest in recent years occurred in 1996, when the crest reached 29.8 feet (click on [this link](#) for a summary of 43 recorded flood crests).

Generating a Broad Range of Options

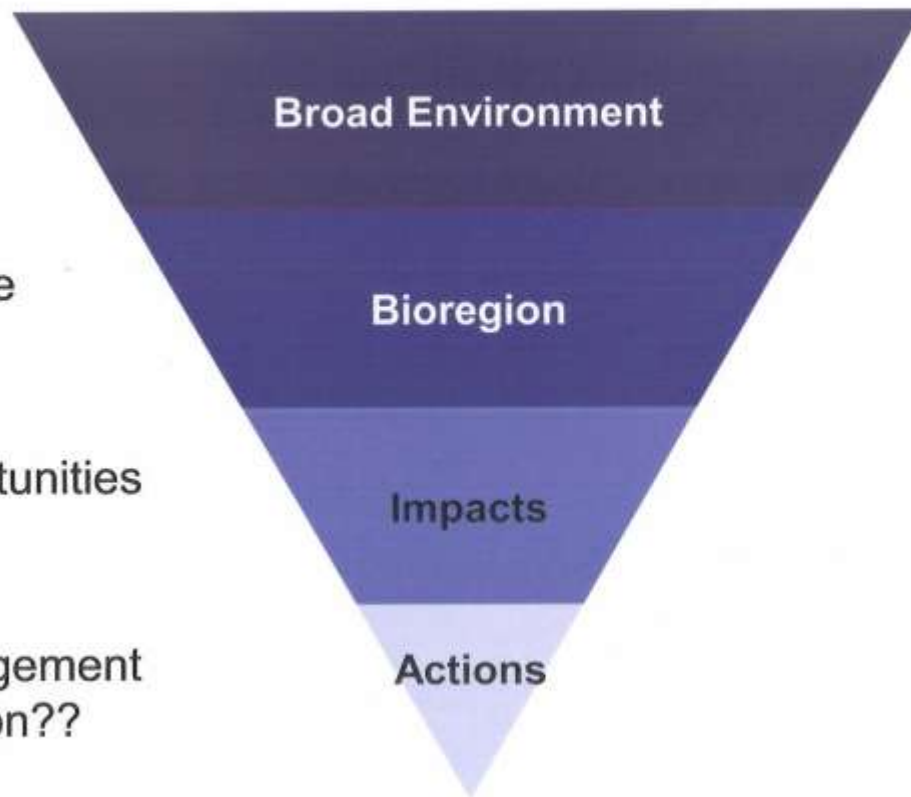
For each scenario . . .

What is this world like?

What effects does this have
on the bioregion?

What pressures and opportunities
will management face?

What could / should management
do if faced with this situation??



Questions?



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